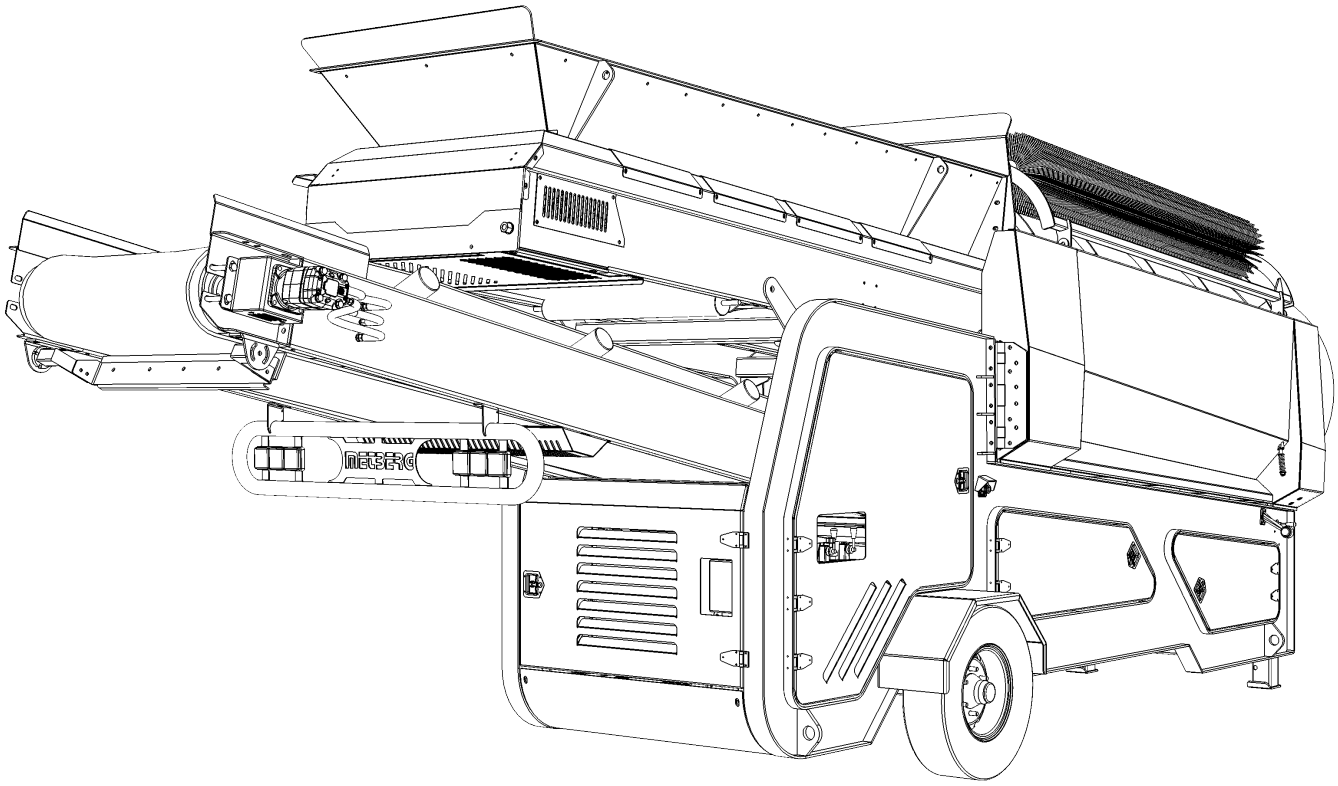
METBERG
ENVIRO



W3000

OPERATION MANUAL

Read this manual prior to initial operation of this machine. Failure to do so can result in serious injury.

This User Manual will

• Help you use your mobile trommel screen in a fast and safe way.
• Read the User Manual before setting up and operating your mobile trommel screen.
• In particular, follow the instructions related to safety.
• Keep this User Manual within easy reach for future reference.
• Please read all additional documents supplied with your mobile trommel screen.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this mobile trommel screen:

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

- Keep children and bystanders away while operating the mobile trommel screen.
- Stay alert, watch what you are doing and use common sense when operating the mobile trommel screen. Do not operate while you are tired or under the influence of drugs, alcohol or medication.
- Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, full face shield, heavy-duty work gloves, non-skid safety shoes, hard hat, and hearing protection will reduce personal injuries.
- Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

Save this manual

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Keep this manual in a safe and dry place for future reference.

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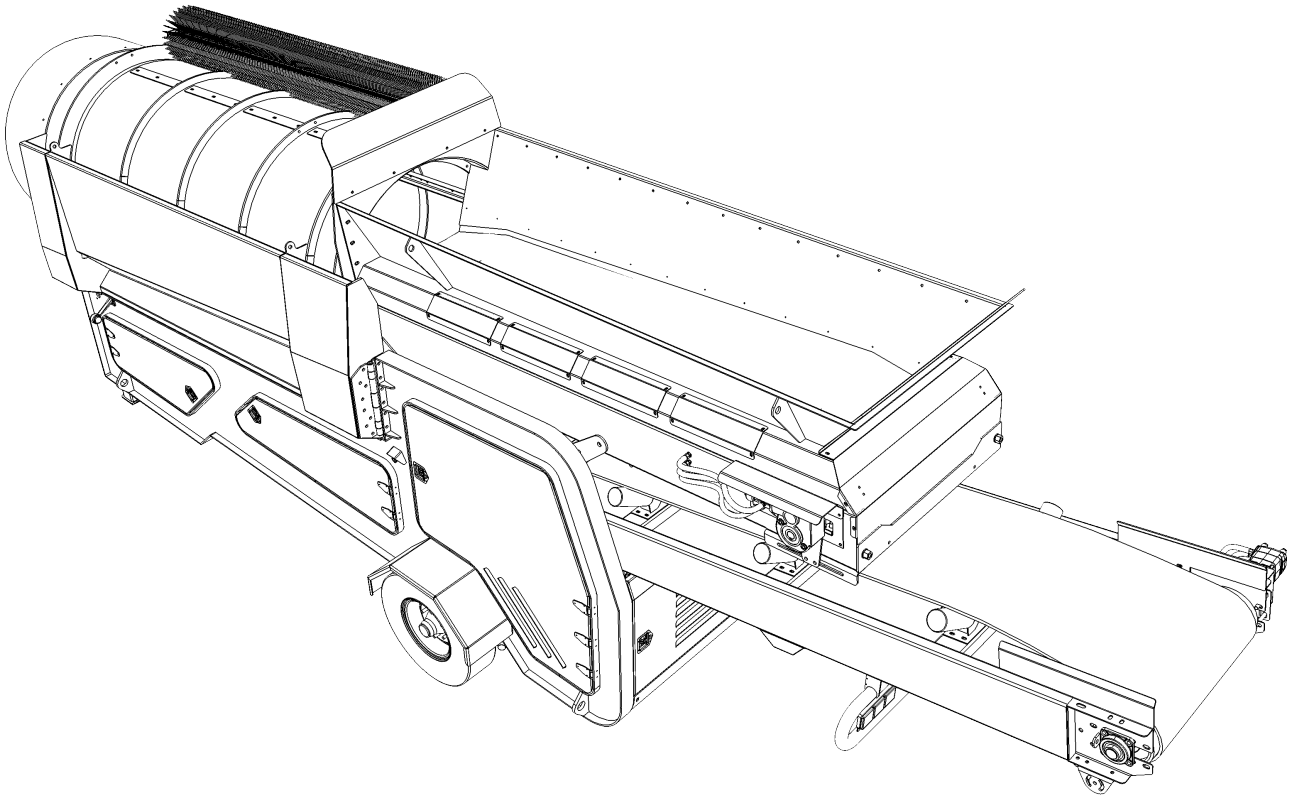
DESCRIPTION

Heavy Duty Mobile Compact Trommel Screen

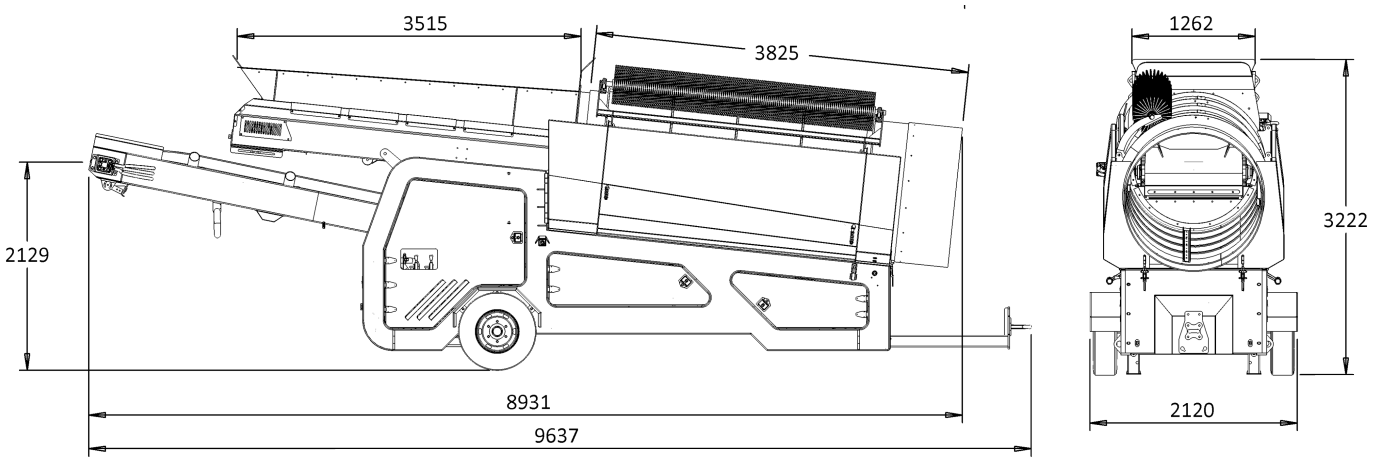


Features:

- 2.2 CAT Turbo Engine
- Wheel Mounted (towable)
- 1.5 x 3.8m Direct Drive Trommel Drum
- Full Drum Accessibility with dual side doors
- Maintenance Friendly
- Fast On Site Setup Time – *Only 10 Minutes*

GENERAL DIMENSIONS

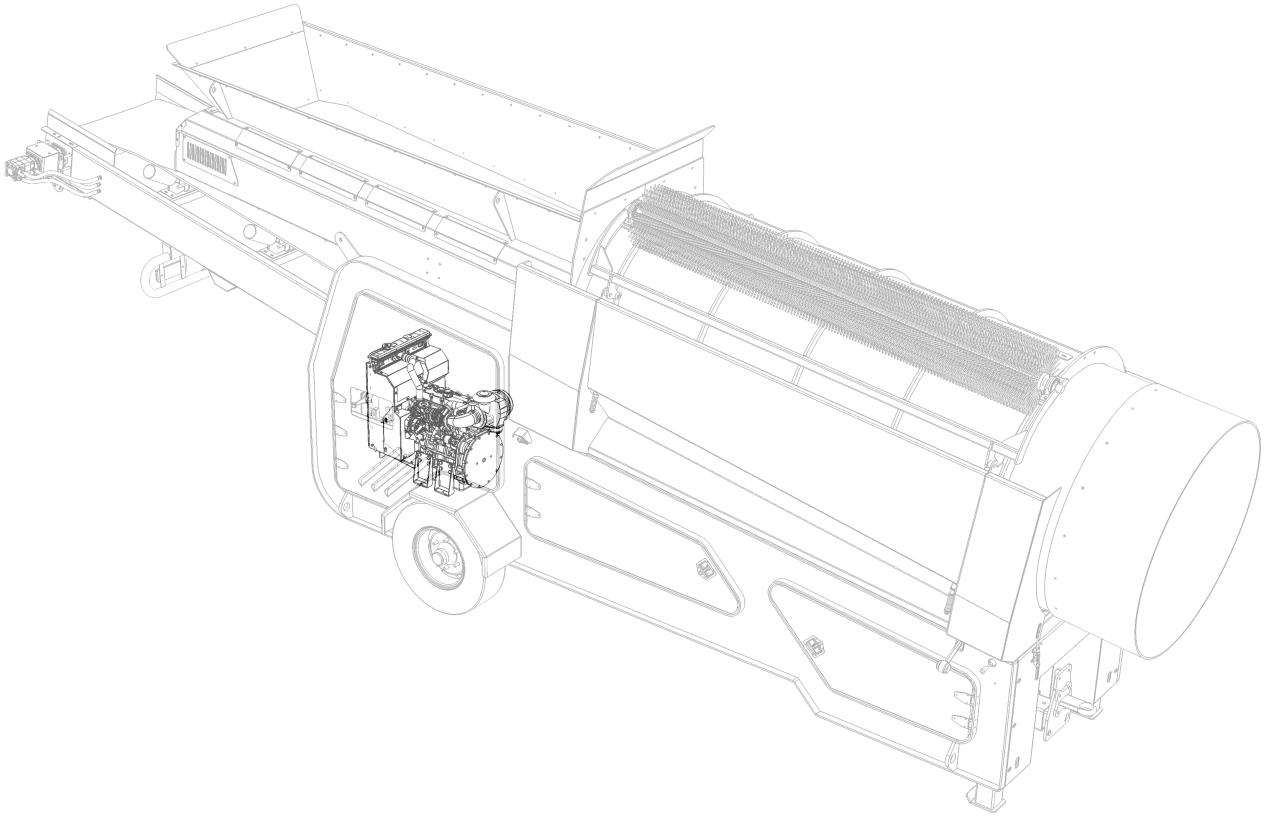
Length – Transport / Operational	9.6m (31’6”) / 8.9m (29’2”)
Width – Transport / Operational	2.1m (6’11”)
Height – Transport / Operational	3.2m (10’6”)
Weight – Transport / Operational (Punch Plate)	6.5 m Tons (14300lbs)



CAPACITIES

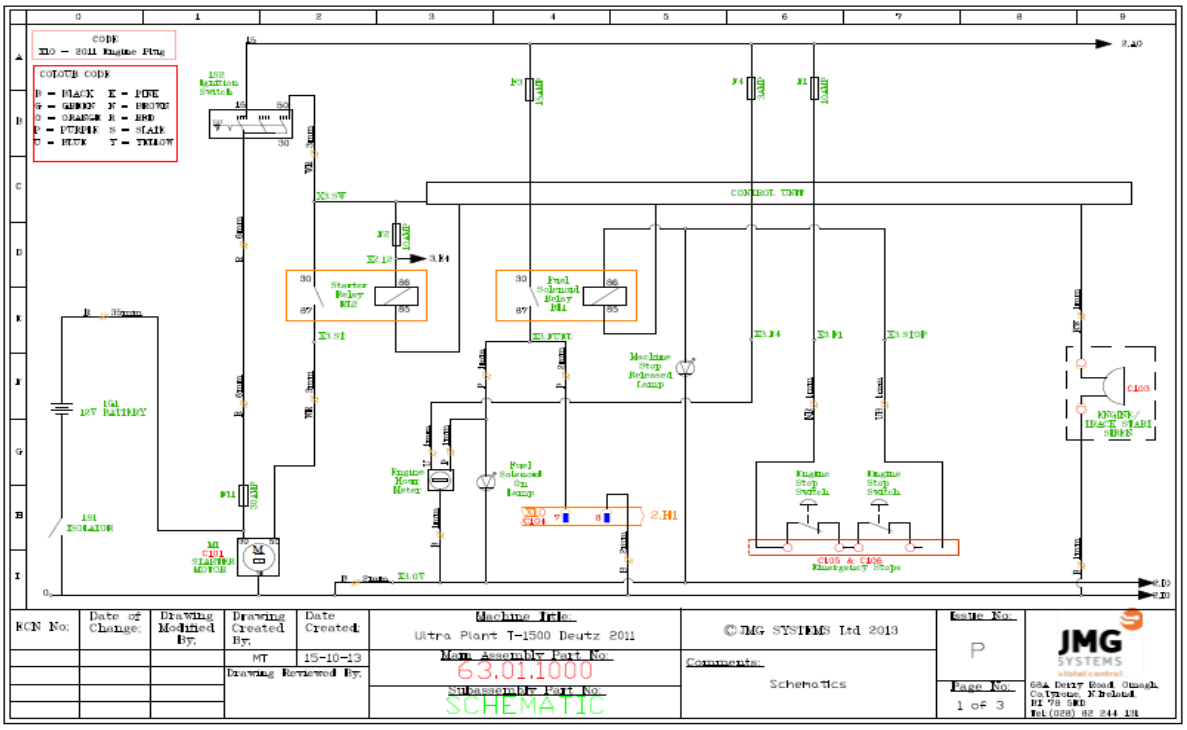
Hopper:	2.5 Cubic M (3.2 Cu Yards)
Fuel Tank:	70 Litres
Hydraulic Tank Capacity:	265 Litres

ENGINE



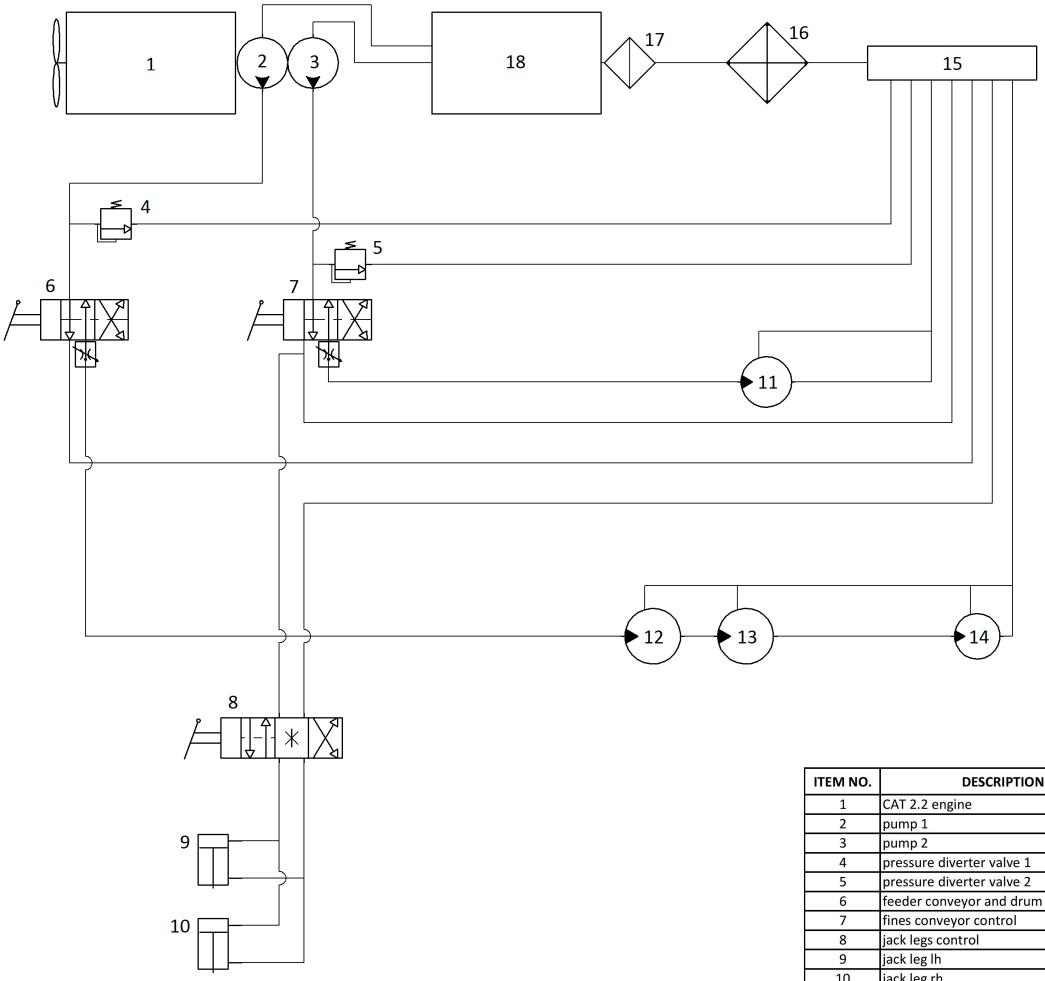
Engine Type:	C2.2 Caterpillar turbo
Engine Power:	60-61 bhp (44.7-45.5 bkW)
RPM:	2800 -3000
Fuel:	Diesel
Fuel Consumption:	4Ltrs/Hour

ELECTRICS



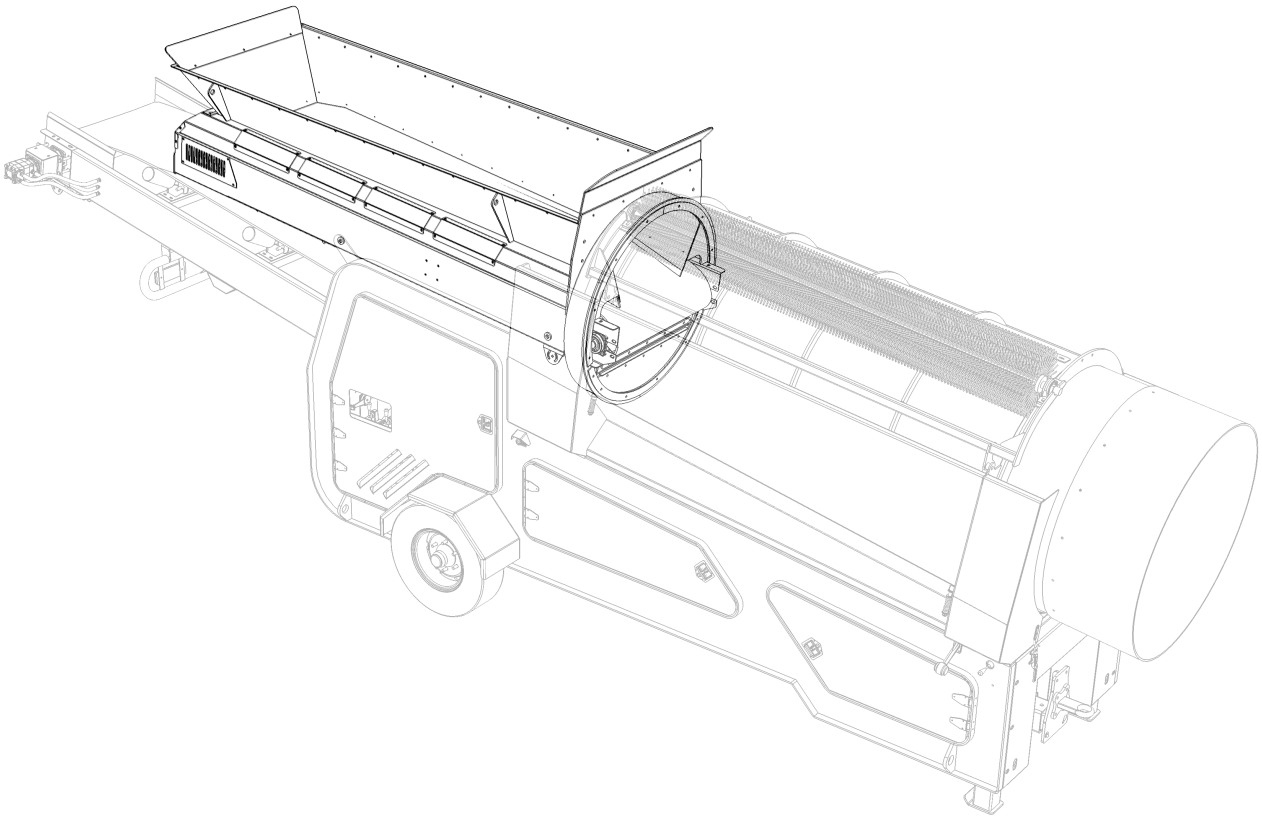
System Voltage:	12V
Chassis Cabling:	SWA Cable
Emergency Stops:	2 (1 right & 1 Left)
Start Siren:	Yes – 10 Second Delay
Engine Shutdowns:	Low Oil Pressure High Temperature Air Filter Blockage

HYDRAULICS



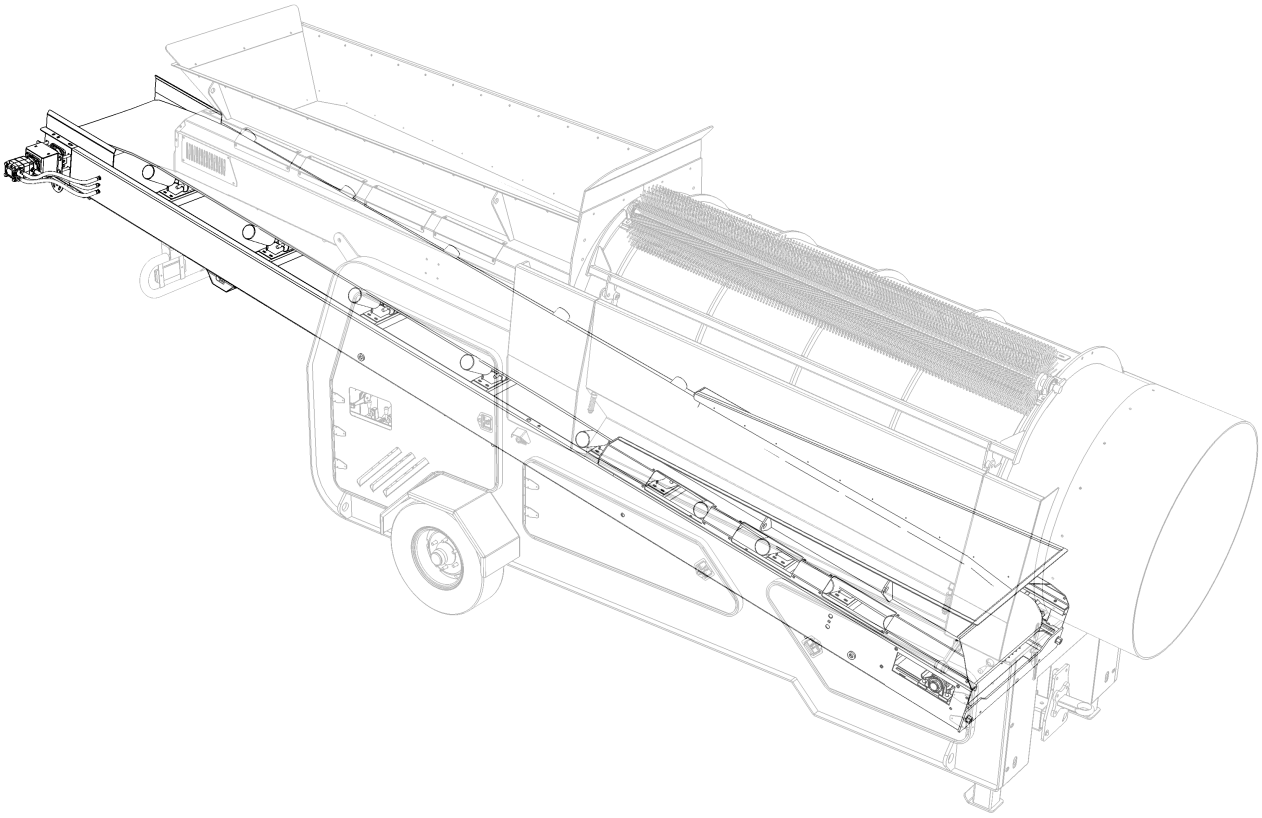
ITEM NO.	DESCRIPTION
1	CAT 2.2 engine
2	pump 1
3	pump 2
4	pressure diverter valve 1
5	pressure diverter valve 2
6	feeder conveyor and drum control
7	fines conveyor control
8	jack legs control
9	jack leg lh
10	jack leg rh
11	fines conveyor motor OMT 400
12	drum motor lh OMT 500
13	drum motor rh OMT 500
14	feeder conveyor motor OMP 315
15	manifold
16	oil to air cooler
17	return filter
18	oil tank

FEED CONVEYOR



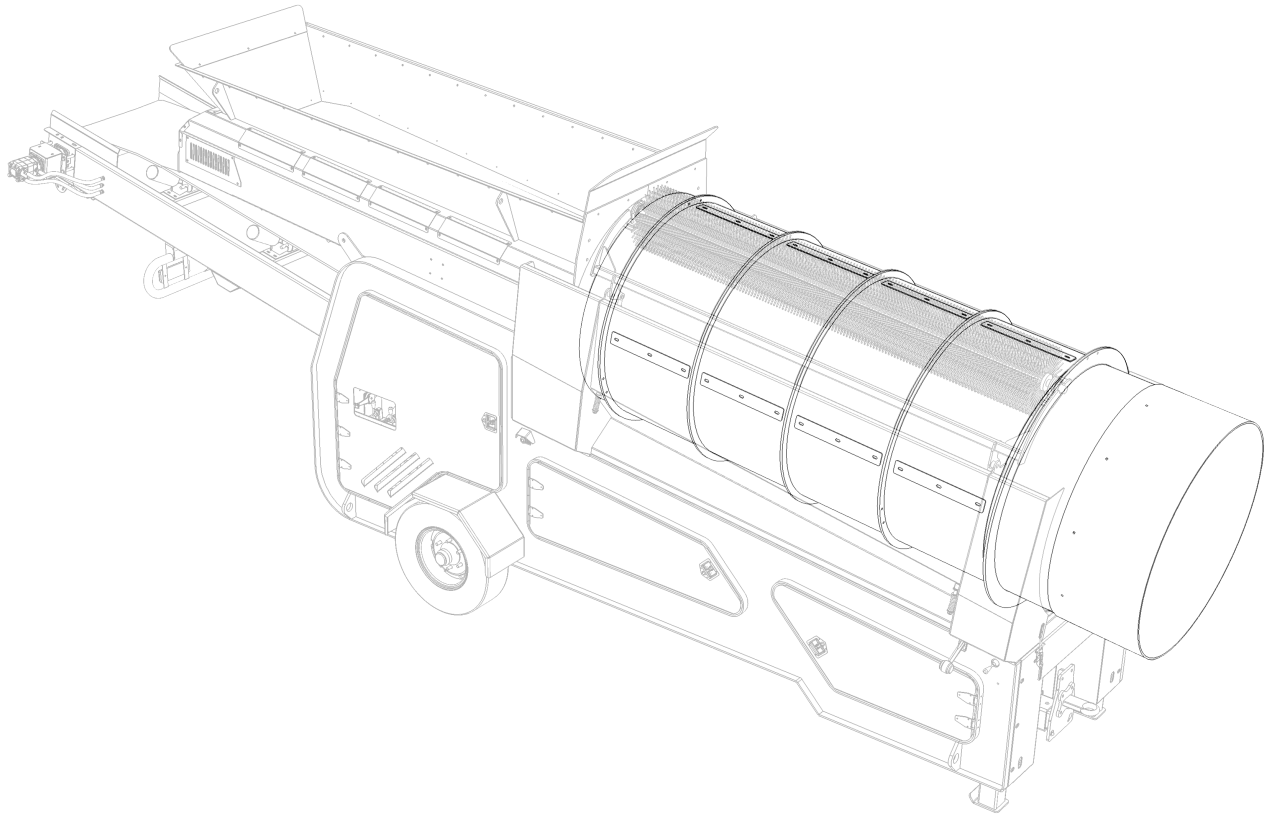
Gearbox:	Berma RT 160
Gearbox Torque / Ratio:	2000Nm cont. / 1:8
Motor:	OMP 315
Belt Width / Length:	1000mm (39”) / 3.4m (11’ 2”)
Belt Specification:	4 Ply 5mm Top
Drive Drum Diameter:	280mm (11”)
Tail Drum Diameter:	230mm (9”)
Maximum Speed:	180 RPM
Adjustable Speed:	0-13 RPM

FINES CONVEYOR



Motor:	OMT 400
Belt Width / Length:	900mm (36”) / 14.5m (47’ 7”)
Belt Specification:	3 Ply 5mm Top
Drive Drum Diameter:	280mm (11”)
Tail Drum Diameter:	230mm (9”)
Maximum Speed:	180 RPM

SCREEN DRUM



Screen Diameter:	1.5m (59”)
Screen Overall Length:	3.7m (12’ 10”)
Motor:	OMT 500
Wheels:	Solid 330 x 110 x 05 Stud

OPERATOR INSTRUCTIONS

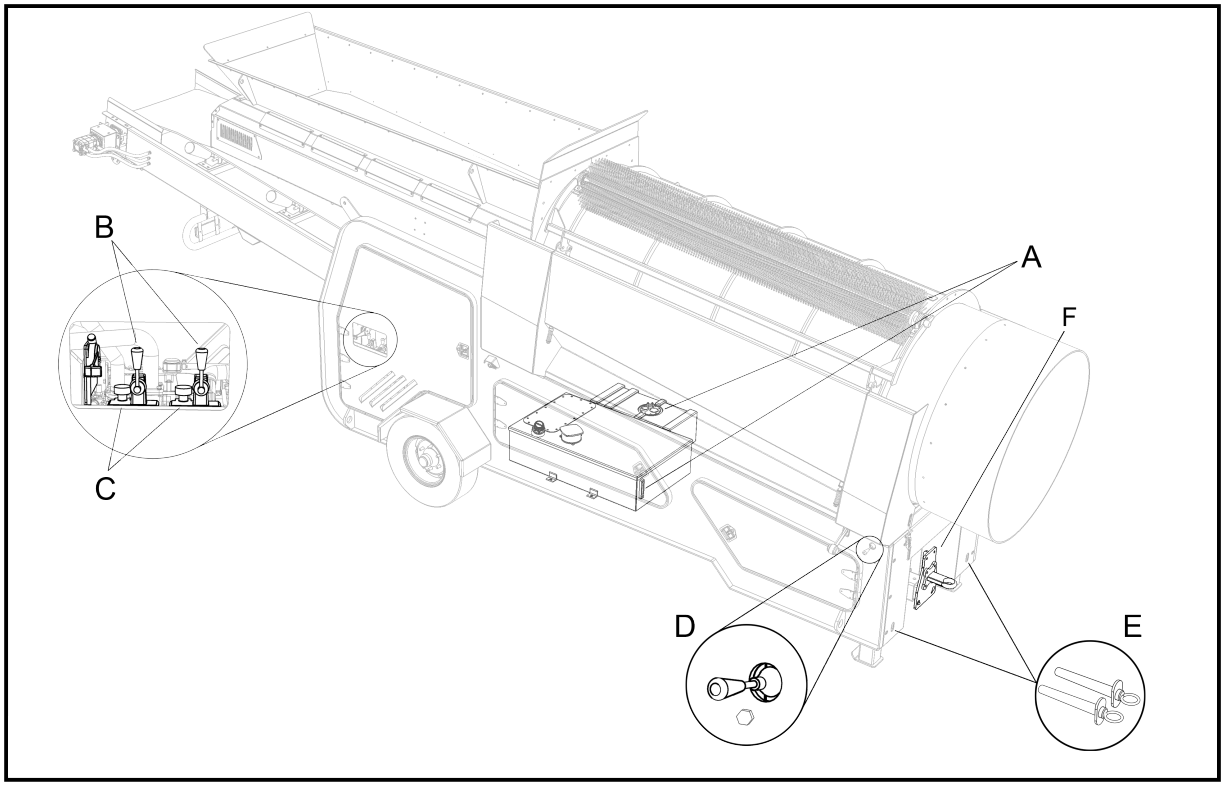
Before Start

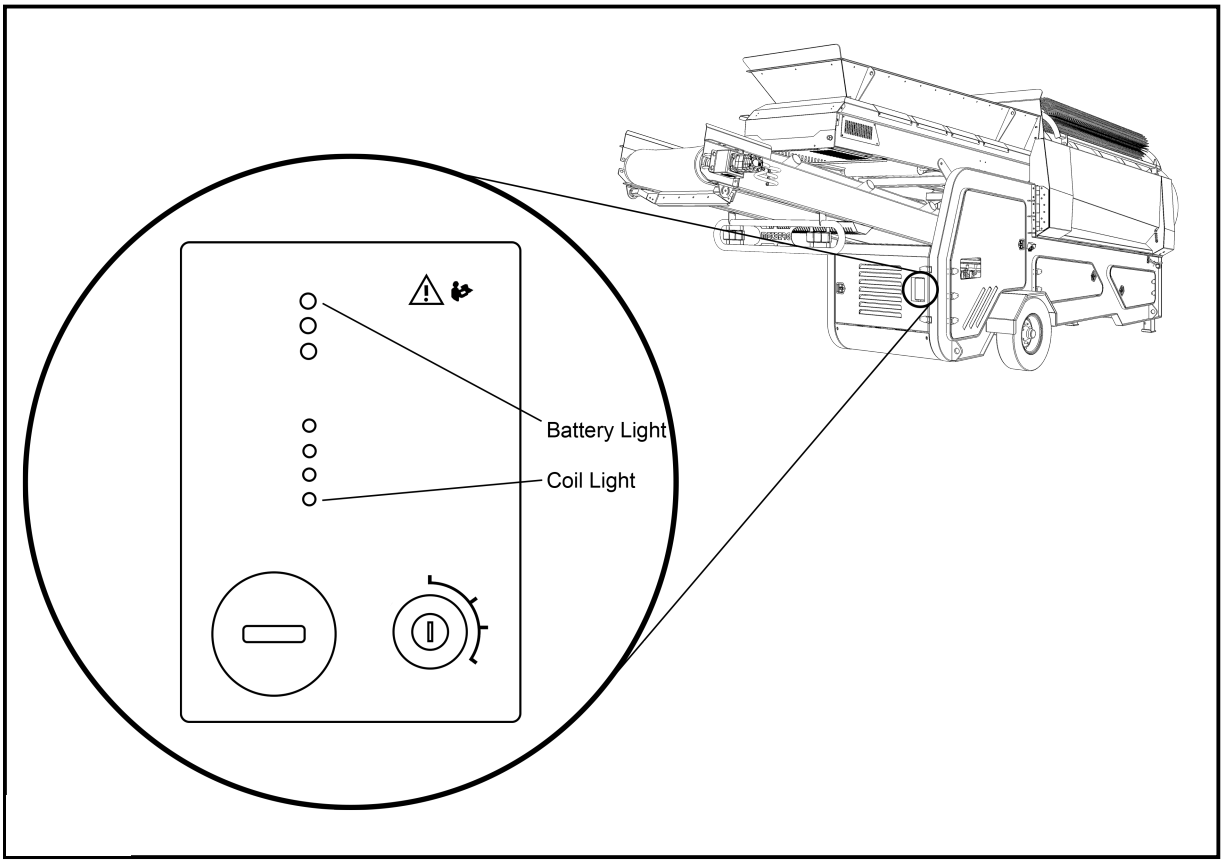
- Check your new Mobile Trommel Screen has arrived in perfect condition as it has been run in at the factory before shipping.
- Read the engine manual, check engine oil level and battery connection.
- Open the side inspection doors on the machine and check both diesel and hydraulic oil levels. (fig 1 – A)
- Ensure the machine is positioned on a level surface.
- ⚠ Ensure all protective guards and covers are fitted and secure. Check that no persons, animals or tools are in the screen drum or feeder.
- Before starting up the engine ensure the hydraulic control levers are in neutral (fig 1 – B) and no one is close to the machine.
- Ensure tow hitch is placed into the retracted position. (fig 1 – F)

Operation

- ⚠ If a warning tag is attached to the engine start switch or to the controls, **DO NOT** start the engine or move the controls. Consult with the person that attached the warning tag before the engine is started.
- Insert and turn the key clockwise to the first position, ensure the battery light illuminates. Turn the key to the second position, wait until the coil light illuminates then turn the key to the third position holding it until the engine fires up. (fig 2)
- When the engine is running, remove the jack leg safety pins (fig 1 – E). Lower the trommel into operating position using the control lever (fig 1 – D) for the jack legs on the right side front of the machine.
- Place the control levers in the ‘on’ position (fig 1 – B), this will start the trommel drum and conveyor belts running. When running, check trommel drum is revolving freely and belts are tracking in line.

- Check for any hydraulic leaks, damage can be caused in transport.
- Both the drum speed and in feed conveyor speed are increased by turning the control knobs on both levers in an anti-clockwise direction. (fig1 – C)
- Set the trommel speed to no. 6, and set in-feed conveyor belt to no. 3.
- Now, material can be loaded into the hopper. Set the in-feed belt to desired speed so as to have the material leaving the trommel drum free of fines.
- While screening always make sure the stockpile of fines does not build up to touch the conveyor, as this will carry around the drum, and damage the belt.
- Keep the oversize pile moved as it can build up and block the trommel.
- Before attempting to adjust belts, free hopper, or any other maintenance, ALWAYS make sure the machine is switched off.
- Avoid putting large concrete or timber blocks in the drum as they may damage belts or screen mesh.
- Heavy duty punch plate mesh can be provided for heavier applications.
- When screening ONLY stop trommel drum in an emergency as it may be difficult to start when loaded.


B
A
F
C
D
E


Battery Light
Coil Light

MAINTENANCE AND SERVICING

Cleaning and Maintenance

The Mobile Trommel has been designed to be extremely accessible to allow any cleaning and maintenance to be carried out with ease. There are 3 doors either side of the chassis and 1 in the rear allowing access to all sides of the components within. A unique feature of the trommel are the doors on both sides of the drum, allowing unlimited access to the drum drive components and making it extremely quick and easy to replace the drum itself.

SCHEDULE

Daily (10 hrs)

- Check Air intake filter.
- Check oil and fuel levels.
- Check conveyor belts for alignment adjust accordingly. (fig 3)
- Check screen mesh is secure.
- Check roller brush is turning freely.

Weekly (50 hrs)

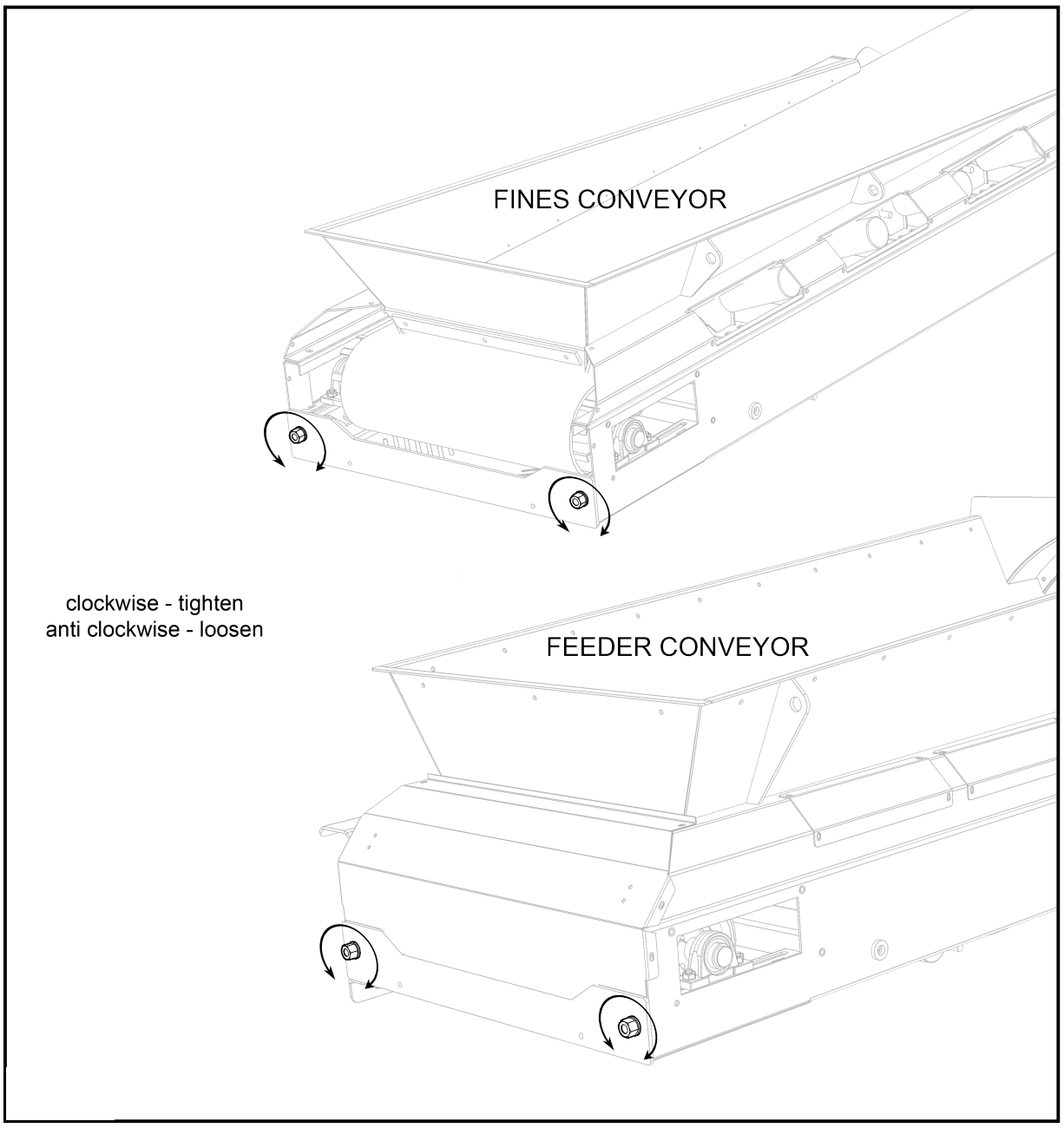
- Grease bearings, NEVER over grease bearings, these are located as per diagram. (fig 4 & fig 5)
- Check all bolts holding motor and gear box and tighten if neccesary.

Quarterly (500 hrs)

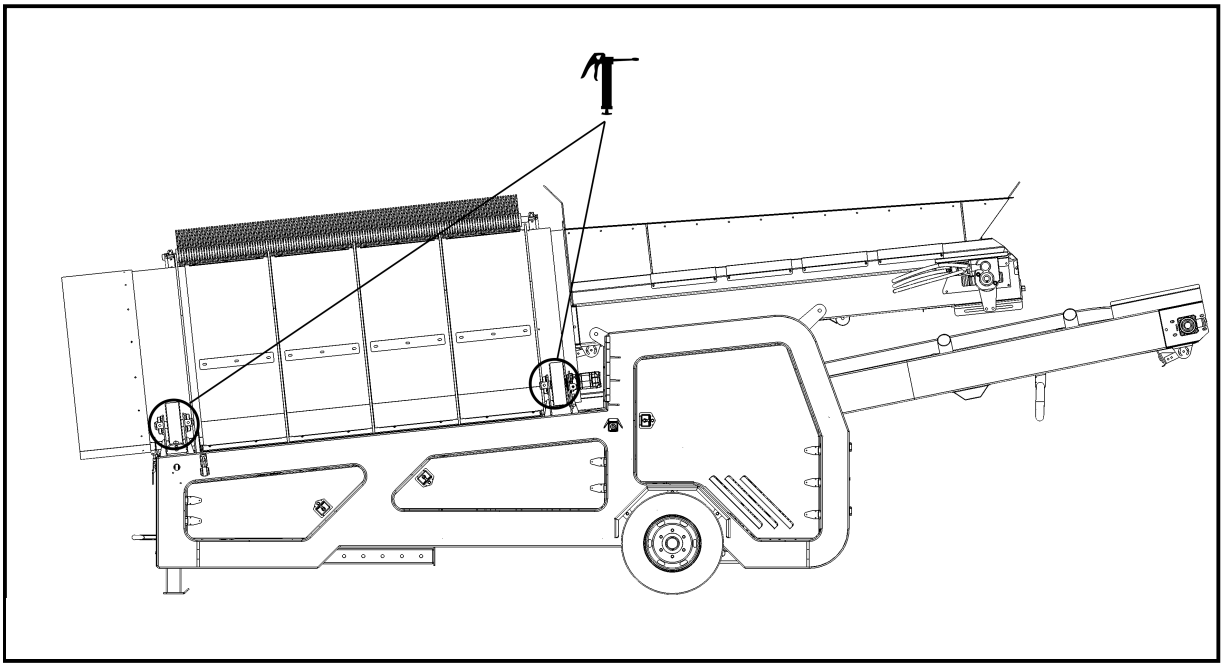
- Check hoses for any leaks or damage.
- Change hydraulic oil filters, turn off oil flow from tank. (fig 6)
- Check conveyor belts, rollers and drum wheels for wear or damage.
- Check roller brush for wear, the brush is self adjusting.
- Check screen mesh for wear or damage.
- Check all skirt rubber for wear as worn rubbers may leak material.
- Check battery connections and fluid etc.

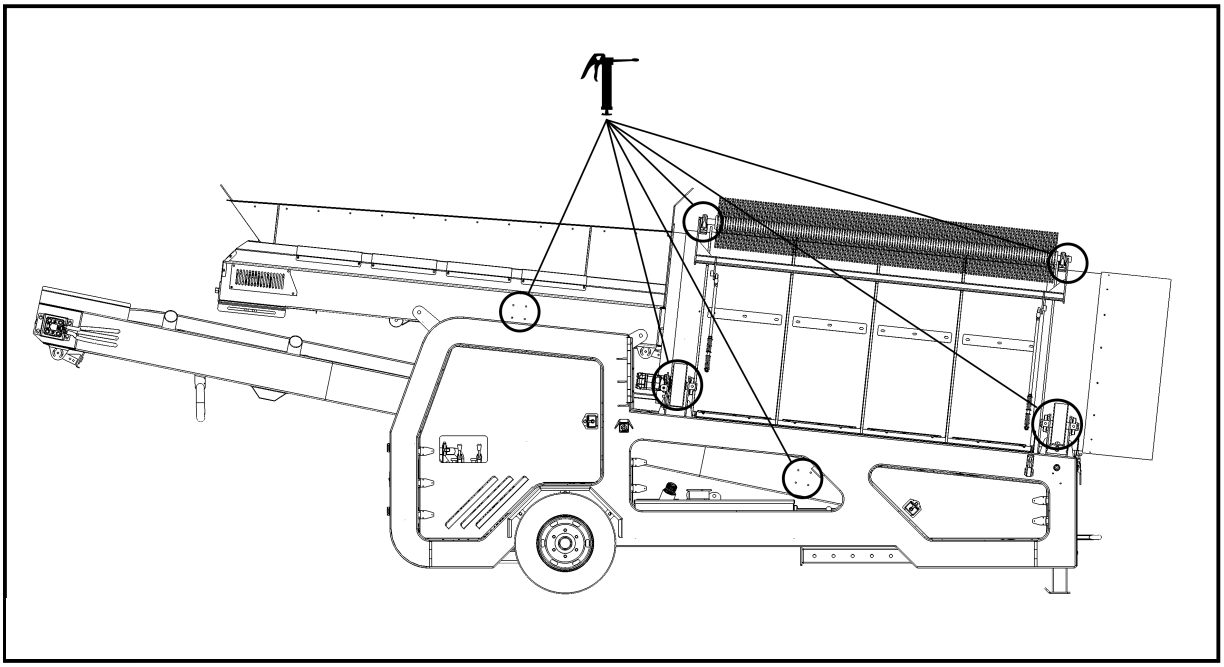
Maintain the engine as per the engine manual provided

Belt Adjustment

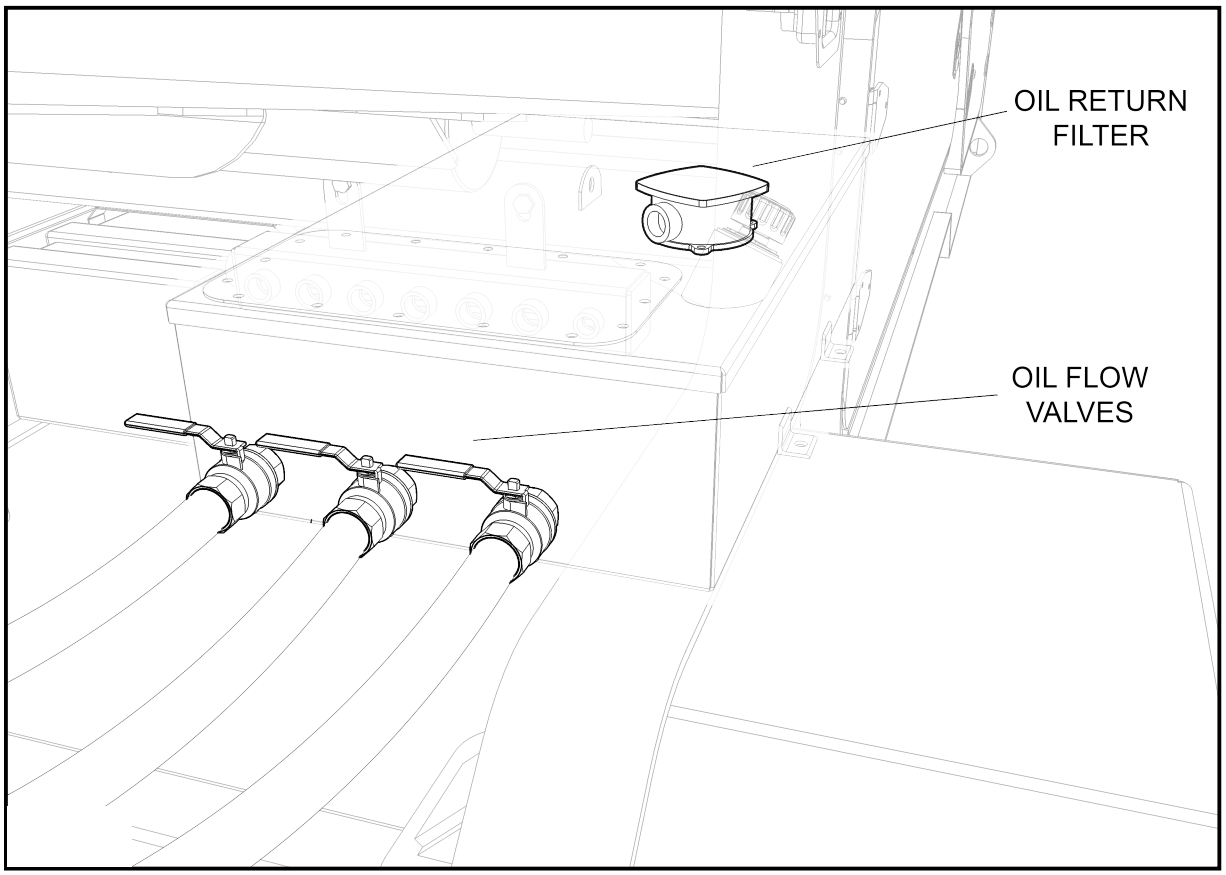


Lubrication





Hydraulic Oil Tank

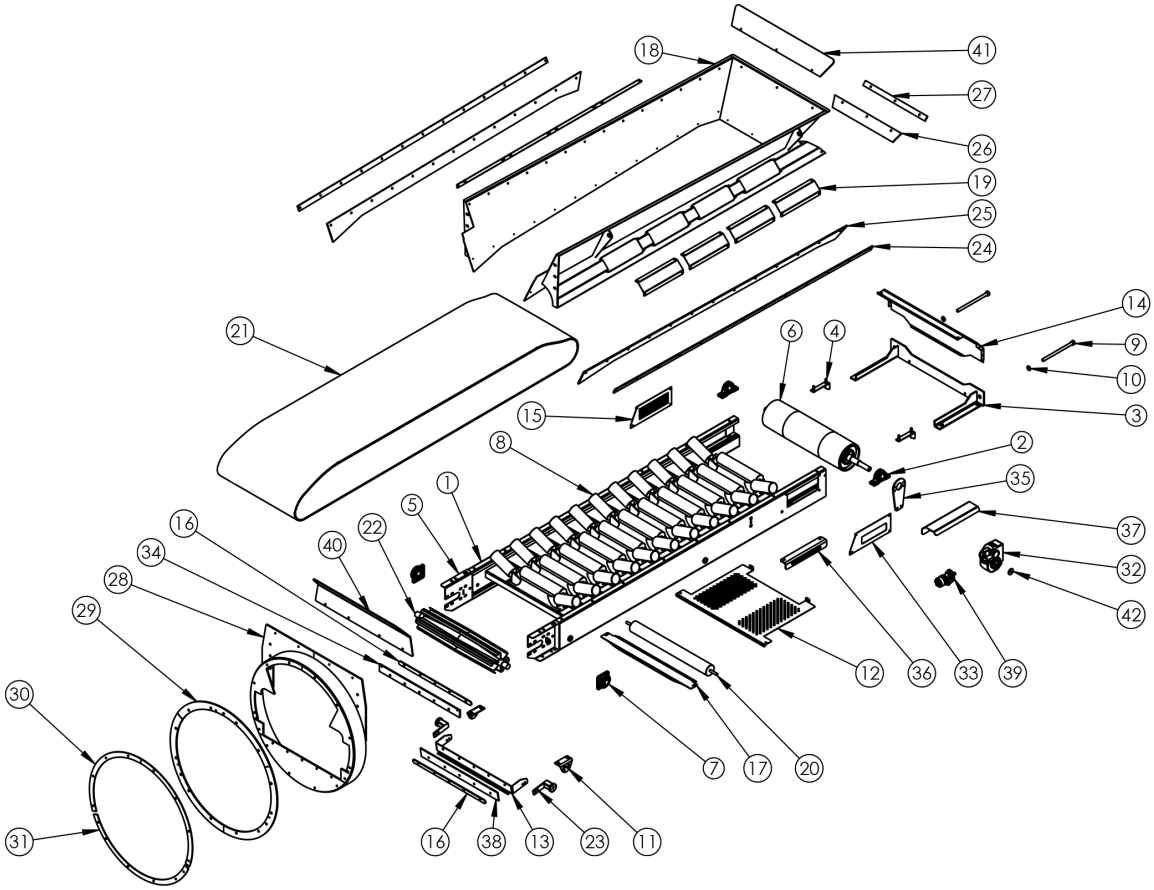


OPTIONAL EXTRAS

- **Oversize conveyor**
- **Hopper Extensions**
- **Extra trommel drum**
- **Hydraulic brakes**
- **Over run brakes and road axles**
- **Road lights**
- **Hardox hopper liners**

PARTS LIST

FEEDER ASSEMBLY

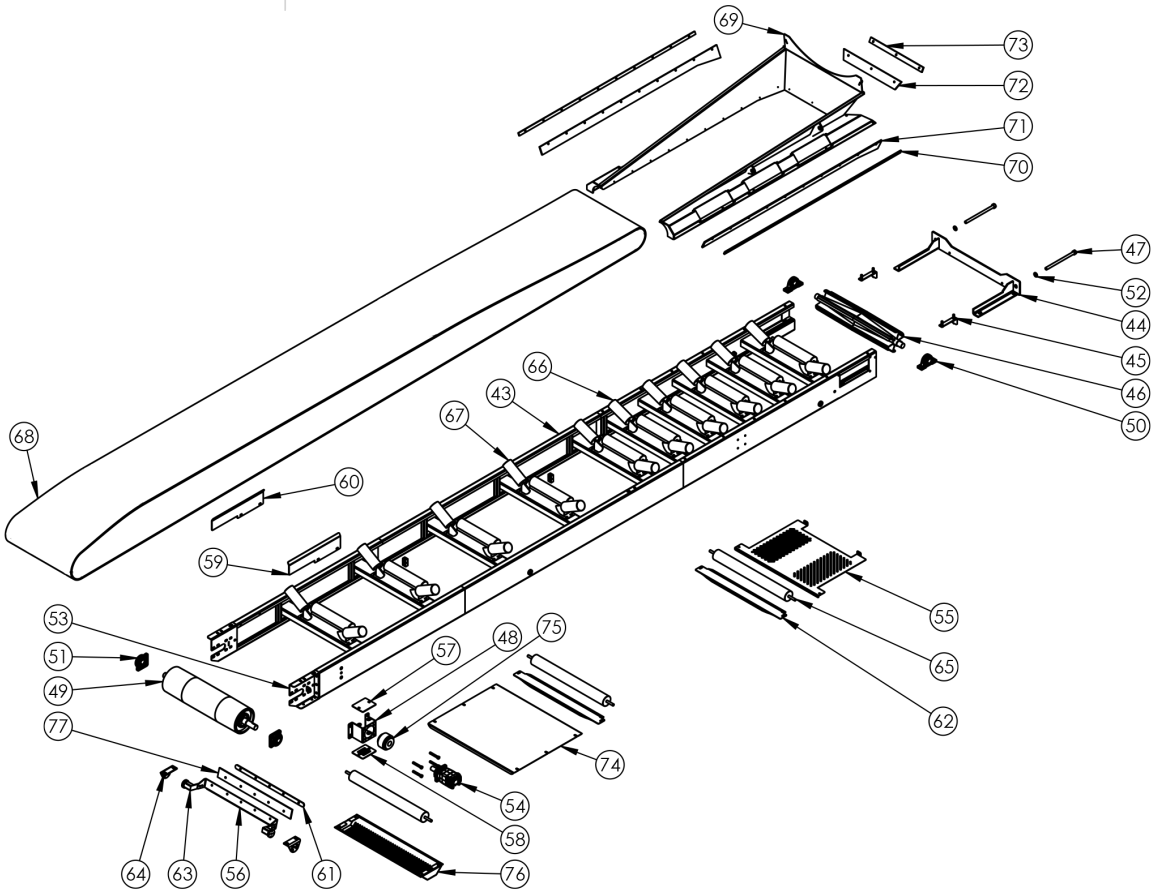


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MP100-41-000	feeder conveyor frame	1
2	UCP210	50mm pillow block bearing	2
3	MP100-43-000	rear panel assy	1
4	MP100-44-000	bearing carrier assy	2
5	MP100-45-000	head bracket assy rh	1
6	MP100-58-000	drive drum Assy	1
7	UCF210	50mm flange bearing	2
8	troughing roller	900x20degrees	11
9	MP100-48-000	M24 Adjuster rod assy	2
10	M24 washer	washer	2
11	MP100-40-003	roster bracket	2
12	MP100-40-010	under guard	1
13	MP100-40-082	scraper bracket	1
14	MP100-40-014	rear guard	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
15	MP100-40-025	side cover	1
16	MP100-40-058	scraper clamp	2
17	MP100-40-064	roller guard	1
18	MP100-50-000	feeder hopper	2
19	MP100-40-056	hopper side cover	1
20	900 wide roller	solid return roller	1
21	MP100-40-999	3.4M 1000 Belt	2
22	MP100-46-000	spoked drum	11
23	roster	roster	2
24	MP100-40-075	feeder side clamp	2
25	MP100-40-076	feeder side rubber	2
26	MP100-40-077	feeder rear rubber	1
27	MP100-40-078	feeder rear clamp	1
28	MP100-75-000	feeder ring assy	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
29	MP100-40-079	feeder ring rubber	3
30	MP100-40-080	upper ring clamp	2
31	MP100-40-081	lower ring clamp	1
32	rt160	Berma gearbox	1
33	MP100-40-086	side gearbox mount	1
34	MP100-40-087	lower rubber	1
35	MP100-40-089	motor torque bracket	1
36	MP100-40-090	torque position bracket	1
37	MP100-40-091	feeder motor guard	1
38	MP100-40-059	scraper rubber	1
39	OMP 315	OMP motor	1
40	MP100-40-095	front hopper deflector	1
41	MP100-40-096	rear hopper deflector	1
42	MP100-40-099	shaft end disc 60mm	1

FINES CONVEYOR ASSEMBLY

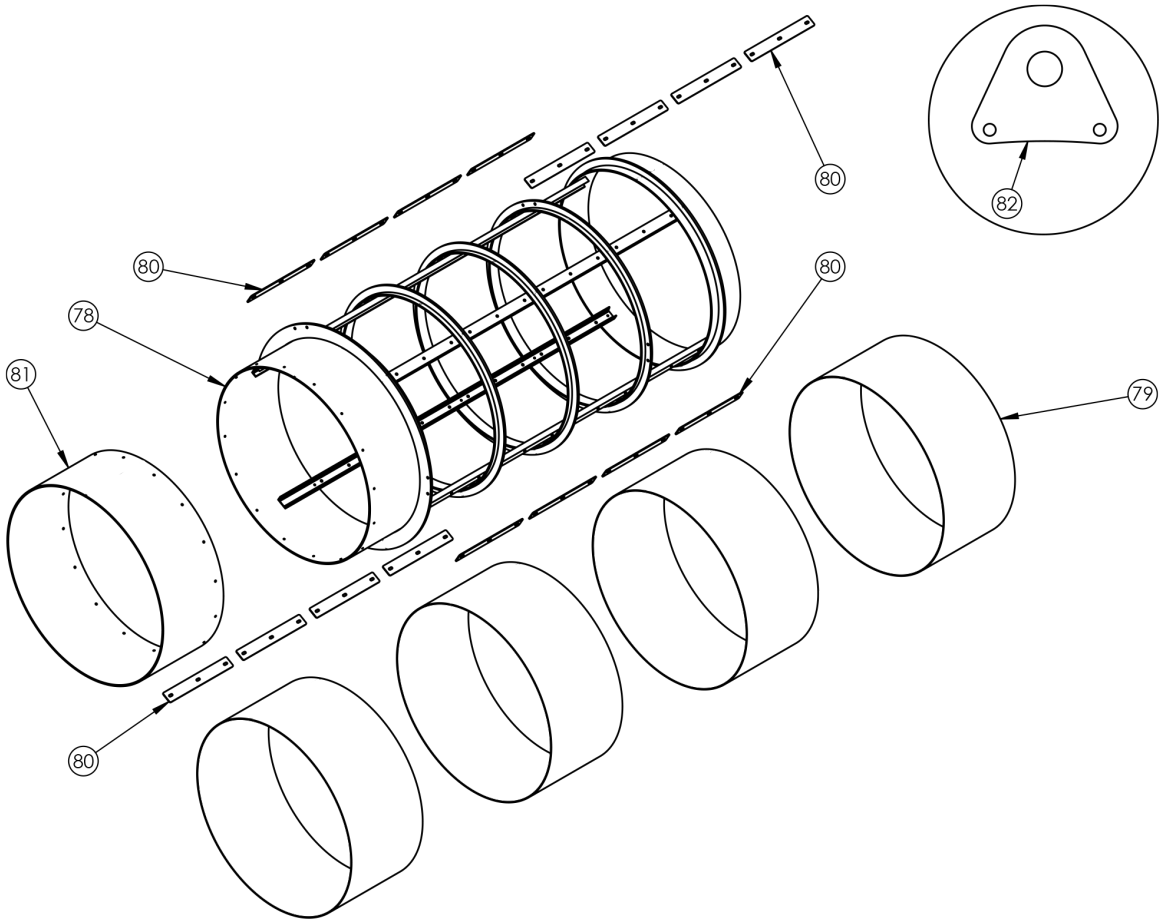


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
43	MP100-61-000	fines conveyor frame	1
44	MP100-43-000	rear panel assy	1
45	MP100-44-000	bearing carrier assy	2
46	MP100-46-000	spoked drum	1
47	MP100-48-000	M24 Adjuster rod assy	2
48	MP100-49-000	motor bracket assy	1
49	MP100-47-000	drive drum Assy	1
50	UCP210	50mm pillow block bearing	2
51	UCF210	50mm flange bearing	2
52	M24 washer	washer	2
53	MP100-62-000	head bracket assy lh	1
54	OMT400	OMT motor	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
55	MP100-40-010	under guard	1
56	MP100-40-011	scraper bracket	1
57	MP100-40-015	motor top cover	1
58	MP100-40-016	motor lower cover	1
59	MP100-40-023	head plate lh	1
60	MP100-40-024	head plate rh	1
61	MP100-40-058	scraper clamp	1
62	MP100-40-064	roller guard	2
63	roster	roster	2
64	MP100-40-003	roster bracket	2
65	900 wide roller	solid return roller	3
66	troughing roller	900x20degrees	6

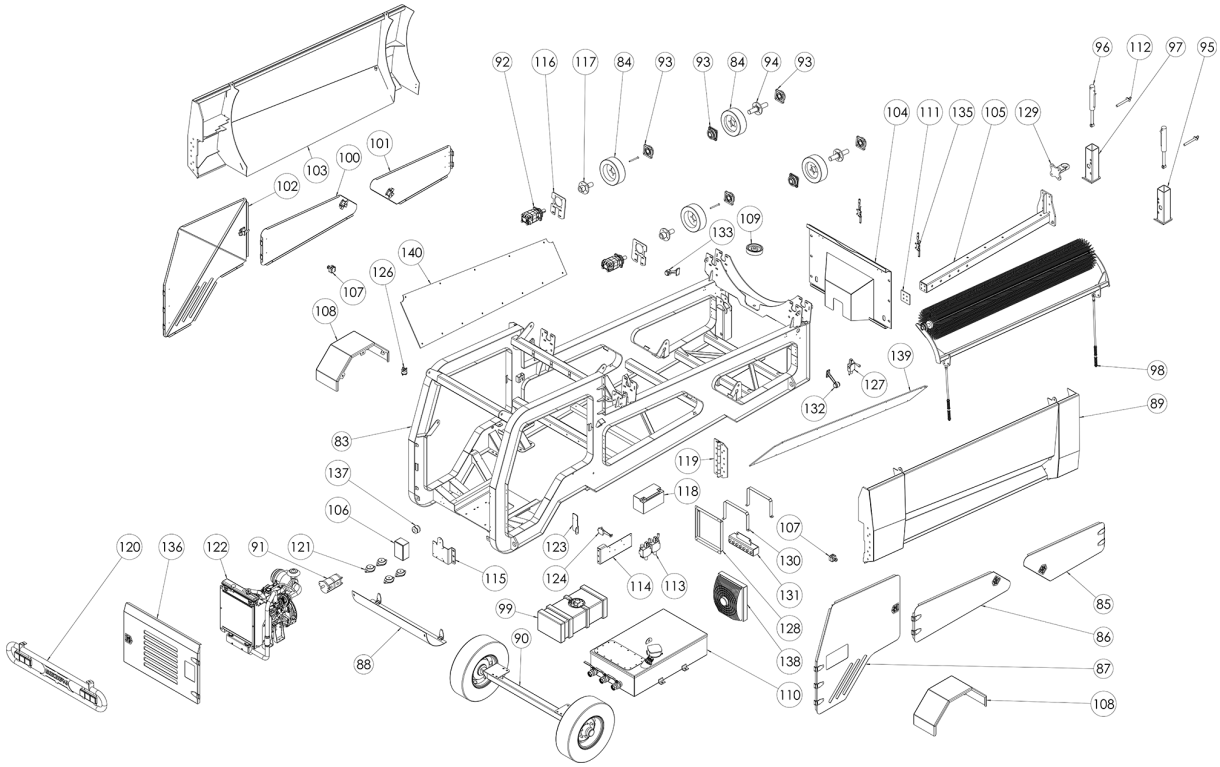
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
67	troughing roller	900x30degrees	4
68	MP100-60-999	7.6M 900 Belt	1
69	MP100-65-000	fines hopper assy	1
70	MP100-60-075	rubber clamp	2
71	MP100-60-076	fines side rubber	2
72	MP100-60-077	rear rubber	1
73	MP100-60-078	rear rubber clamp	1
74	MP100-60-001	heat shield	1
75	hrc coupling	hrc coupling	1
76	MP100-68-000	roller basket 900	1
77	MP100-40-059	scraper rubber	1

SCREEN DRUM ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
78	MP100-10-001	front drum ring	1
79	MP100-10-007	drum mesh insert	4
80	MP100-10-010	mesh clamp	16
81	MP100-10-011	Rubber drum extension	1
82	MP100-10-008	drum lifting eye	2

MAIN CHASSIS ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
83	MP100-01-000	welded chassis frame	1
84	MP100-01-156	trommel wheel 330	4
85	MP100-01-039	front door rh	1
86	MP100-01-041	centre door rh	1
87	MP100-24-000	rear side door rh	1
88	MP100-01-045	lower engine hatch	1
89	MP100-20-000	side door rh	1
90	MP100-88-000	wheeled axle assy	1
91	Casappa pump	bi pump	1
92	OMT500	OMT motor	2
93	UCF210	50mm flange bearing	6
94	MP100-04-000	idler axle assy	2
95	MP100-05-000	support leg assembly rh	1
96	200 stroke ram	hydraulic ram	2
97	MP100-06-000	support leg assembly lh	1
98	MP100-23-000	brush assy	1
99	TT-5647	70 litre tektank	1
100	MP100-01-141	centre door lh	1
101	MP100-01-139	front door lh	1
102	MP100-34-000	rear side door lh	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
103	MP100-30-000	side door lh	1
104	MP100-09-000	front panel assy	4
105	MP100-12-000	towbar assy	1
106	electric panel	electric panel (wheel)	1
107	Emergency Stop Button	emergency stop button	1
108	MP100-01-083	mudguard	1
109	200-50-50-48-30	vulkollan thrust wheel	1
110	MP100-70-000	oil tank assy	1
111	MP100-01-148	towbar stop plate	1
112	MP100-80-000	lock pin	2
113	flow control valve	built in flow valve single	6
114	MP100-01-149	valve bracket rh	2
115	MP100-01-150	electric panel bracket	1
116	MP100-01-153	drum drive bracket	2
117	MP100-01-151	drum drive shaft	1
118	12v battery 850CCA	12v battery	1
119	MP100-15-000	large door hinge	1
120	MP100-67-000	light bar	1
121	27760-106060	engine mount	1
122	CAT 2.2turbo	2.2 turbo engine	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
123	MP100-01-155	throttle bracket	1
124	CH240	unidrum lever hand control	1
125	24505	lockout kit	1
126	2484-16	master disconnect switch	1
127	p40 valve	p40 valve single	1
128	MP100-72-000	oil cooler frame	1
129	MP100-16-000	welded tow hitch assy	1
130	MP100-01-170	fuel tank strap	2
131	MP100-81-000	oil manifold	1
132	1004LR	LED marker light RH	1
133	1004LE	LED marker light LH	1
134	MP100-01-171	brush assembly spacer	1
135	k0052	overcentre latch	2
136	MP100-01-048	engine door (wheel)	1
137	Model E4 siren	warning siren	1
138	ASA-TT 16	oil cooler	1
139	MP100-20-031	* polyprop door insert rh	1
140	MP100-30-031	* polyprop door insert lh	1
	** - optional*		

WARRANTY

For twelve months from purchase date, Metberg Enviro will replace for the original purchaser, FREE OF CHARGE, any part or parts found upon examination at our Factory to be defective under normal use and service, on account of defects in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be borne by the purchaser.

This warranty will become void if in judgement of Metberg Enviro the machine has been subject to misuse, negligence, alterations, damage by accident or lack of required normal maintenance, or if the machine has been used for a purpose for which it was not designed.

METBERG ENVIRO

DECLARATION OF CONFORMITY

Machine Type..... _____

Model ..... _____

Serial No. ..... _____

We declare that the above specified product complys with the Essential Health & Safety Regulations identified in Directive 89/392/EEC and as ammended by Directives 91/368/EEC, 93/44/EEC and 93/68/EEC.

Name of Authorised person: Jody Kinghan

Position of Authorised person: Sales Director

Signature of Authorised Person: _____

Date of Issue: _____